

ATTACHMENT C

Waste Management Plan for the Production Area

For

Existing Concentrated Animal Feeding Operations (Milk Cow Dairies)

A Waste Management Plan (WMP) for the production area is required for all milk cow dairies subject to the federal Concentrated Animal Feeding Operation (CAFO) regulations and Order No. ___ and shall address all of the items below. The portions of the WMP that are related to facility and design specifications and operation and maintenance (items 1e.iii, 2, 3, 4, and 5) must be prepared and certified by a civil engineer who is registered pursuant to California law or other person as may be permitted under the provisions of the California Business and Professions Code to assume responsible charge of such work.

1. A description of the facility that includes:
 - a. The address and legal description of the property (i.e., Assessor's Parcel Number and Township, Range, Section(s), and Baseline Meridian);
 - b. The name(s), address(es), and telephone number(s) of the property owner(s), facility operator(s), and the contact person for the facility;
 - c. A brief description (i.e., total acres, field layout, etc.) of: land used for the dairy production area; all cropland where waste produced at the facility is applied and a notation showing whether the land is owned, leased, or used pursuant to a formal or informal agreement; and cropland that is part of the facility but is not used for waste application;
 - d. Present and proposed maximum animal population (total animal population that produces waste) and volume of wastewater generated; and
 - e. A Site Map showing:
 - i. Property boundaries and the location of all existing and proposed facilities including buildings, holding ponds, solids separation facilities (settling basins or mechanical separators), other areas where animal wastes are deposited or stored, wastewater conveyance structures, pumping facilities, structures used for animal housing, drainage controls (berms/levees, etc.), culverts, drainage easements, drainage flow directions, feed and manure storage areas, croplands where wastes are applied (whether farmed by the owner/operator or another party), tailwater drainage controls, and other components of the waste handling and storage system;

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- ii. Overall dimensions, elevation contours, a vicinity map, north arrow, and the date the map was prepared. The map shall be drawn on a published base map (i.e., a topographic map) using an appropriate scale that shows sufficient details of all facilities; and
 - iii. Size, elevation, and location of all facilities proposed for containment of process generated wastewater and storm water runoff on the property (berms/levees, holding ponds, upstream diversion structures, etc.). Cross section details of these facilities shall be presented.
 - iv. Proposed sampling points to monitor all discharges (i.e. storm water runoff location(s) and wastewater discharge location(s) from the waste management units) and surface water upstream and downstream of discharges, as required under Monitoring and Reporting Program No. _____.
2. Engineering design calculations showing if the existing containment structures are able to contain all manure and process wastewater including the runoff and direct precipitation from a 25-year, 24-hour rainfall event. The determination of the necessary storage volume shall be consistent with the CAFO Final Rule (68 Federal Register, page 7215) and shall reflect the maximum length of time anticipated between retention pond emptying events, and shall reflect: manure, wastewater, and other wastes accumulated during the storage period; normal precipitation less evaporation on the surface area during the entire storage period; normal runoff from the facility's drainage area during the storage period; 25-year, 24-hour precipitation on the surface (at the required design storage volume level) of the facility; 25-year, 24-hour runoff from the facility's drainage area; residual solids after liquids have been removed; and necessary freeboard (one foot of freeboard for below ground retention ponds and two feet of freeboard for above ground retention ponds). If adequate containment is not present, the plan should include proposed modifications or improvements with the corresponding design to achieve the necessary containment and a schedule for construction and certification to comply with the Schedule of Tasks K.1 of Order No. _____.
3. An engineering report showing if the facility has adequate flood protection. The report shall describe the size, elevation, and location of all facilities present to protect the facility from inundation or washout as follows:
- a. For facilities in the Sacramento River and San Joaquin River Basins (with a map and cross-sections to scale, calculations, and specifications as necessary) showing if:
 - i. The retention ponds and manured areas at facilities in operation on or before November 27, 1984 are protected from inundation or washout by overflow from any stream channel during 20-year peak storm flow; or

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- ii. Existing facilities in operation on or before November 27, 1984 that are protected against 100-year peak storm flows will continue such protection; or
- iii. Facilities, or portions thereof, which began operation after November 27, 1984, are protected against 100-year peak storm flows.
- b. For facilities in the Tulare Lake Basin (with a map and cross-sections to scale, calculations, and specification as necessary) showing if the facility is protected from overflow from stream channels during 20-year peak stream flows for facilities that existed as of 25 July 1975 and protected from 100-year peak stream flows for facilities constructed after 25 July 1975. Facilities expanded after 8 December 1984 must be protected from 100-year peak stream flows.

If the facility's flood protection does not meet these minimum requirements, the plan should include proposed modifications or improvements with the corresponding design to achieve the necessary flood protection and a schedule for construction and certification to comply with the Schedule of Tasks K.1 of Order No. _____.

- 4. An engineering report showing if the following design and construction criteria are met:
 - a. Corrals and/or pens are designed and constructed to collect and divert all wastewater to the retention pond;
 - b. The animal housing area (i.e., barn, shed, milk parlor, etc.) is designed and constructed to divert all water that has contacted animal wastes to the retention pond; and
 - c. Manure and feed storage areas are designed and constructed to collect and divert runoff and leachate from these areas to the retention pond.

If the facility does not meet the above design and construction criteria, the plan should include proposed modifications or improvements to achieve the criteria and a schedule for construction and certification to comply with the Schedule of Tasks K.1 of Order No. _____.

- 5. An operation and maintenance plan to ensure that:
 - a. All precipitation and surface drainage from outside manured areas, including that collected from roofed areas resulting from storms up to and including a 25-year, 24-hour storm, is diverted away from manured areas, unless such drainage is fully contained;
 - b. Ponds are managed to maintain the required freeboard and to prevent odors: breeding of mosquitoes, damage from burrowing animals, damage from equipment during

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- removal of solids, embankment settlement, erosion, seepage, excess weeds, algae, and vegetation;
- c. Holding ponds provide maximum pond capacity prior to winter storms and will maintain capacity considering buildup of solids; holding ponds comply with the minimum freeboard required in Order No. _____; animals at the facility are prevented from entering surface waters within the confined areas;
 - d. There is no discharge to surface waters from containment structures, unless rainfall causes overflow from a storage facility designed, constructed, maintained, and operated to contain all process generated wastewater plus the direct precipitation and runoff from a 25-year, 24-hour storm;
 - e. Corrals and/or pens are maintained to collect and divert all wastewater to the retention pond and to prevent ponding of water and to minimize infiltration of water into the underlying soils;
 - f. The animal housing area (i.e., barn, shed, milk parlor, etc.) is maintained to collect and divert all water that has contacted animal wastes to the retention pond and to minimize the infiltration of water into the underlying soils;
 - g. Manure and feed storage areas are maintained to ensure that runoff and leachate from these areas is collected and diverted to the retention pond and to minimize infiltration of leachate from these areas to the underlying soils;
 - h. Lands that receive dry manure are managed to minimize erosion, prevent nuisance conditions, prevent runoff, and applied manure is incorporated into surface soils within 48 hours after manure application and before discharge to surface water;
 - i. Salt in animal rations is limited to the amount required to maintain animal health and optimum production;
 - j. All dead animals are disposed of properly;
 - k. Chemicals and other contaminants handled at the facility are not disposed of in any manure or process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants; and
 - l. All animals are prevented from entering any surface water within the confined area.
6. Identification by a qualified person of protocols for appropriate sampling and testing of manure, process wastewater, and soil. Protocols for soil sampling and testing should include the number of samples and sampling depths to adequately characterize the soil for purposes of determining appropriate manure and wastewater application rates to cropland.

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7. Documentation by a qualified person, as specified in Required Reports and Notices I.2. of Order No. _____, that there are no cross-connections that would allow the backflow of wastewater into a production well or an irrigation well.
8. The certification required in Required Reports and Notices I.3.a of Order No. _____.

ADMINISTRATIVE DRAFT